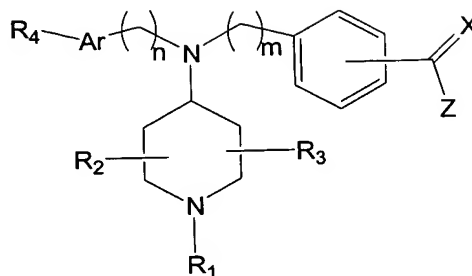


## WHAT IS CLAIMED IS:

1. A compound of Formula (I):



**Formula I**

wherein:

- 5 Ar is selected from the group consisting of aryl and heteroaryl;

m is an integer from 0 to 2, n is an integer from 0 to 2, with the proviso that m and n are not both simultaneously 0;

- 10 R<sub>1</sub> is selected from the group consisting of hydrogen, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, aryl, aryl(C<sub>1-8</sub>)alkyl, heteroaryl(C<sub>1-8</sub>)alkyl, amino(C<sub>1-8</sub>)alkyl, C<sub>1-8</sub>alkyl-NH-(C<sub>1-8</sub>)alkyl, (C<sub>1-8</sub>alkyl)<sub>2</sub>-N-(C<sub>1-8</sub>)alkyl, hydroxy(C<sub>1-8</sub>)alkyl and C<sub>1-8</sub>alkoxy(C<sub>1-8</sub>)alkyl;

- 15 R<sub>2</sub> and R<sub>3</sub> are optionally present and independently selected from C<sub>1-8</sub>alkyl;

- R<sub>4</sub> is one to three substituents independently selected from the group consisting of hydrogen, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, aryl(C<sub>1-8</sub>)alkyl, C<sub>1-8</sub>alkoxy, aryloxy, aryl(C<sub>1-8</sub>)alkyloxy, C<sub>1-8</sub>alkylthio, trifluoro(C<sub>1-8</sub>)alkyl, trifluoro(C<sub>1-8</sub>)alkoxy, amino, -NH(C<sub>1-8</sub>)alkyl, -N[(C<sub>1-8</sub>)alkyl]<sub>2</sub>, -NH(aryl), -N(aryl)<sub>2</sub>, -NH(C<sub>1-8</sub>)alkylaryl, -N[(C<sub>1-8</sub>)alkylaryl]<sub>2</sub>, -CO<sub>2</sub>H, -CO<sub>2</sub>(C<sub>1-8</sub>)alkyl, -CO<sub>2</sub>(aryl), -C(O)NH<sub>2</sub>, -C(O)NH(C<sub>1-8</sub>)alkyl, -C(O)N[(C<sub>1-8</sub>)alkyl]<sub>2</sub>, -NHC(O)(C<sub>1-8</sub>)alkyl, -SO<sub>2</sub>H, -SO<sub>2</sub>(C<sub>1-8</sub>)alkyl, -S(O<sub>2</sub>)NH<sub>2</sub>, -S(O<sub>2</sub>)NH(C<sub>1-8</sub>)alkyl, -S(O<sub>2</sub>)N[(C<sub>1-8</sub>)alkyl]<sub>2</sub>, -C(O)(C<sub>1-8</sub>)alkyl, -C(O)aryl, -C(O)(C<sub>1-8</sub>)alkylaryl, aryl, heteroaryl, heterocyclyl, halogen, hydroxy, cyano, and nitro;

X is selected from the group consisting of O and S;

5 Z is  $N(R_5)(R_6)$  or is a 5- or 6-membered saturated, monocyclic, heterocyclic ring, wherein said heterocyclic ring contains one nitrogen member which is the point of attachment, optionally contains one additional heteroatom member of oxygen, sulfur or nitrogen and optionally contains a double bond between two ring members;

10  $R_5$  and  $R_6$  are independently selected from the group consisting of hydrogen,  $C_{1-8}$ alkyl, hydroxy( $C_{1-8}$ )alkyl,  $C_{2-8}$ alkenyl,  $C_{3-8}$ cycloalkyl, aryl and aryl( $C_{1-8}$ )alkyl, wherein said cycloalkyl, aryl and the aryl portion of aryl( $C_{1-8}$ )alkyl are optionally substituted with one to three substituents independently selected from the group consisting of  $C_{1-8}$ alkyl,  $C_{2-8}$ alkenyl,  
15  $C_{1-8}$ alkoxy, trifluoro( $C_{1-8}$ )alkyl, trifluoro( $C_{1-8}$ )alkoxy,  $C_{3-8}$ cycloalkyl and halogen; and,

the moiety  $-C(X)Z$  is attached on the phenyl at the 3 or 4 position;

20 and pharmaceutically acceptable enantiomers, diastereomers and salts thereof.

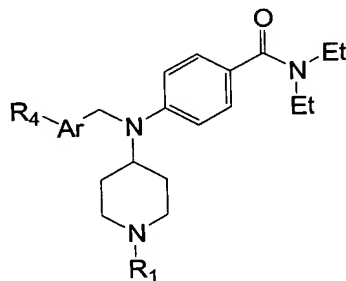
2. The compound of claim 1 wherein Ar is phenyl, naphthyl, furyl, thienyl, oxazolyl, thiazolyl, imidazolyl, isozazolyl, isothiazolyl, indolyl, indazolyl,  
25 benzo[b]thienyl, quinoliny, isoquinoliny, quinazolinyl, pyrrolyl, imidazolyl, pyrazolyl, pyridinyl, pyrimidinyl, pyrazinyl, or pyridazinyl.

3. The compound of claim 1 wherein Ar is phenyl or pyridinyl.

30 4. The compound of claim 1 wherein m is an integer from 0 to 1, n is an integer from 0 to 1, with the proviso that m and n are not both simultaneously 0.

5. The compound of claim 1 wherein R<sub>1</sub> is selected from the group consisting of hydrogen, C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl, aryl, aryl(C<sub>1-4</sub>)alkyl, heteroaryl(C<sub>1-4</sub>)alkyl, NH<sub>2</sub>(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub>alkyl-NH-(C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>alkyl)<sub>2</sub>-N-(C<sub>1-4</sub>)alkyl, hydroxy(C<sub>1-4</sub>)alkyl and C<sub>1-4</sub>alkoxy(C<sub>1-4</sub>)alkyl.
- 5 6. The compound of claim 1 wherein R<sub>1</sub> is selected from the group consisting of hydrogen, C<sub>1-4</sub>alkyl and C<sub>2-4</sub>alkenyl.
- 10 7. The compound of claim 1 wherein R<sub>1</sub> is selected from the group consisting of hydrogen, *n*-propyl and allyl.
8. The compound of claim 1 wherein R<sub>2</sub> and R<sub>3</sub> are optionally present and independently selected from C<sub>1-4</sub>alkyl.
- 15 9. The compound of claim 1 wherein R<sub>2</sub> and R<sub>3</sub> are not present.
10. The compound of claim 1 wherein R<sub>4</sub> is one to three substituents.
- 20 11. The compound of claim 1 wherein R<sub>4</sub> is independently selected from the group consisting of hydrogen, C<sub>1-8</sub>alkyl, C<sub>1-8</sub>alkoxy, trifluoro(C<sub>1-8</sub>)alkyl, trifluoro(C<sub>1-8</sub>)alkoxy, cyano, halogen, hydroxy and nitro.
- 25 12. The compound of claim 1 wherein R<sub>4</sub> is independently selected from the group consisting of hydrogen, C<sub>1-8</sub>alkoxy, trifluoro(C<sub>1-8</sub>)alkyl, hydroxy and halogen.
- 30 13. The compound of claim 1 wherein R<sub>4</sub> is independently selected from the group consisting of hydrogen, methoxy, trifluoromethyl, hydroxy, fluoro and chloro.
14. The compound of claim 1 wherein X is O.
15. The compound of claim 1 wherein Z is N(R<sub>5</sub>)(R<sub>6</sub>).

16. The compound of claim 1 wherein  $R_5$  and  $R_6$  are independently selected from the group consisting of hydrogen,  $C_{1-4}$ alkyl, hydroxy( $C_{1-4}$ )alkyl,  $C_{2-4}$ alkenyl,  $C_{3-8}$ cycloalkyl, aryl and aryl( $C_{1-4}$ )alkyl, wherein said  
 5 cycloalkyl, aryl and the aryl portion of aryl( $C_{1-8}$ )alkyl are optionally substituted with one to three substituents independently selected from the group consisting of  $C_{1-4}$ alkyl,  $C_{2-4}$ alkenyl,  $C_{1-4}$ alkoxy,  $C_{3-8}$ cycloalkyl, halogen, trifluoro( $C_{1-4}$ )alkyl and trifluoro( $C_{1-4}$ )alkoxy.
- 10 17. The compound of claim 1 wherein  $R_5$  and  $R_6$  are independently selected from the group consisting of hydrogen and  $C_{1-4}$ alkyl.
18. The compound of claim 1 wherein  $R_5$  and  $R_6$  are independently selected from the group consisting of hydrogen, methyl and ethyl.
- 15 19. The compound of claim 1 wherein the compound of Formula (I) is selected from Formula (Ia):



wherein

- 20 Ar is selected from the group consisting of aryl and heteroaryl;

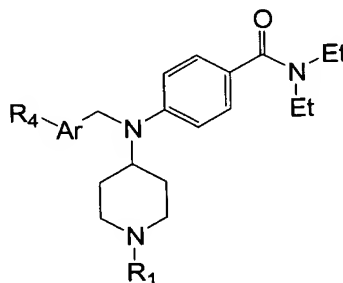
$R_1$  is selected from the group consisting of hydrogen,  $C_{1-8}$ alkyl,  $C_{2-8}$ alkenyl, aryl, aryl( $C_{1-8}$ )alkyl, heteroaryl( $C_{1-8}$ )alkyl, amino( $C_{1-8}$ )alkyl,  $C_{1-8}$ alkyl-NH-( $C_{1-8}$ )alkyl, ( $C_{1-8}$ alkyl) $_2$ -N-( $C_{1-8}$ )alkyl, hydroxy( $C_{1-8}$ )alkyl and  
 25  $C_{1-8}$ alkoxy( $C_{1-8}$ )alkyl;

$R_4$  is one to three substituents independently selected from the group consisting of hydrogen,  $C_{1-8}$ alkyl,  $C_{2-8}$ alkenyl,  $C_{2-8}$ alkynyl,  $C_{3-8}$ cycloalkyl,

aryl(C<sub>1-8</sub>)alkyl, C<sub>1-8</sub>alkoxy, aryloxy, aryl(C<sub>1-8</sub>)alkyloxy, C<sub>1-8</sub>alkylthio,  
 trifluoro(C<sub>1-8</sub>)alkyl, trifluoro(C<sub>1-8</sub>)alkoxy, amino, -NH(C<sub>1-8</sub>)alkyl,  
 -N[(C<sub>1-8</sub>)alkyl]<sub>2</sub>, -NH(aryl), -N(aryl)<sub>2</sub>, -NH(C<sub>1-8</sub>)alkylaryl, -N[(C<sub>1-8</sub>)alkylaryl]<sub>2</sub>,  
 -CO<sub>2</sub>H, -CO<sub>2</sub>(C<sub>1-8</sub>)alkyl, -CO<sub>2</sub>(aryl), -C(O)NH<sub>2</sub>, -C(O)NH(C<sub>1-8</sub>)alkyl,  
 5 -C(O)N[(C<sub>1-8</sub>)alkyl]<sub>2</sub>, -NHC(O)(C<sub>1-8</sub>)alkyl, -SO<sub>2</sub>H, -SO<sub>2</sub>(C<sub>1-8</sub>)alkyl, -S(O<sub>2</sub>)NH<sub>2</sub>,  
 -S(O<sub>2</sub>)NH(C<sub>1-8</sub>)alkyl, -S(O<sub>2</sub>)N[(C<sub>1-8</sub>)alkyl]<sub>2</sub>, -C(O)(C<sub>1-8</sub>)alkyl, -C(O)aryl,  
 -C(O)(C<sub>1-8</sub>)alkylaryl, aryl, heteroaryl, heterocyclyl, halogen, hydroxy, cyano,  
 and nitro;

10 and pharmaceutically acceptable enantiomers, diastereomers and salts thereof.

20. The compound of claim 1 wherein the compound of Formula (I) is selected from Formula (Ia):



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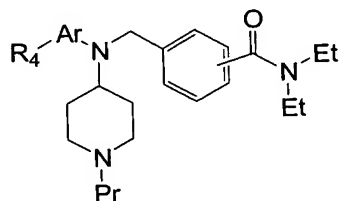
Wherein Ar, R<sub>1</sub> and R<sub>4</sub> are dependently selected from:

R <sub>1</sub>	Ar	R <sub>4</sub>
<i>n</i> -Pr	phenyl	3-methoxy
<i>n</i> -Pr	phenyl	3-hydroxy
<i>n</i> -Pr	phenyl	3-chloro
<i>n</i> -Pr	phenyl	2-methoxy
<i>n</i> -Pr	phenyl	2-hydroxy
<i>n</i> -Pr	phenyl	3-fluoro

<i>n</i> -Pr	phenyl	H
H	phenyl	H
allyl	phenyl	H
<i>i</i> -Pr	phenyl	H
<i>N, N</i> -dimethyl aminopropyl	phenyl	H
<i>n</i> -Pr	phenyl	4-methoxy
<i>n</i> -Pr	3-pyridinyl	H
Me	phenyl	H
<i>n</i> -Pr	phenyl	3-trifluoromethyl
<i>n</i> -Pr	phenyl	4-fluoro

and pharmaceutically acceptable salts thereof.

21. The compound of claim 1 wherein the compound of Formula (I) is selected from Formula (Ib):



5

wherein

Ar is selected from the group consisting of aryl and heteroaryl;

- 10  $R_4$  is one to three substituents independently selected from the group consisting of hydrogen,  $C_{1-8}$ alkyl,  $C_{2-8}$ alkenyl,  $C_{2-8}$ alkynyl,  $C_{3-8}$ cycloalkyl, aryl( $C_{1-8}$ )alkyl,  $C_{1-8}$ alkoxy, aryloxy, aryl( $C_{1-8}$ )alkyloxy,  $C_{1-8}$ alkylthio, trifluoro( $C_{1-8}$ )alkyl, trifluoro( $C_{1-8}$ )alkoxy, amino, -NH( $C_{1-8}$ )alkyl, -N[( $C_{1-8}$ )alkyl]<sub>2</sub>, -NH(aryl), -N(aryl)<sub>2</sub>, -NH( $C_{1-8}$ )alkylaryl, -N[( $C_{1-8}$ )alkylaryl]<sub>2</sub>,  
15 -CO<sub>2</sub>H, -CO<sub>2</sub>( $C_{1-8}$ )alkyl, -CO<sub>2</sub>(aryl), -C(O)NH<sub>2</sub>, -C(O)NH( $C_{1-8}$ )alkyl,

-C(O)N[(C<sub>1-8</sub>)alkyl]<sub>2</sub>, -NHC(O)(C<sub>1-8</sub>)alkyl, -SO<sub>2</sub>H, -SO<sub>2</sub>(C<sub>1-8</sub>)alkyl, -S(O<sub>2</sub>)NH<sub>2</sub>,  
 -S(O<sub>2</sub>)NH(C<sub>1-8</sub>)alkyl, -S(O<sub>2</sub>)N[(C<sub>1-8</sub>)alkyl]<sub>2</sub>, -C(O)(C<sub>1-8</sub>)alkyl, -C(O)aryl,  
 -C(O)(C<sub>1-8</sub>)alkylaryl, aryl, heteroaryl, heterocyclyl, halogen, hydroxy, cyano,  
 and nitro;

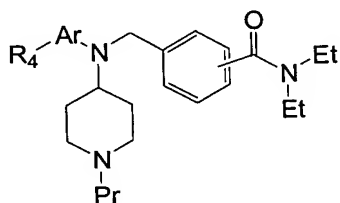
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the moiety -C(X)Z is attached on the phenyl at the 3 or 4 position;

and pharmaceutically acceptable enantiomers, diastereomers and salts thereof.

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22. The compound of claim 1 wherein the compound of Formula (I) is selected from Formula (Ib):



**Formula (Ib)**

Wherein Ar, R<sub>4</sub> and the position for -C(O)(NEt<sub>2</sub>) is selected from:

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Ar	R <sub>4</sub>	Amide Substitution
phenyl	3-methoxy	4
phenyl	3-methoxy	3
phenyl	3-hydroxy	3
phenyl	H	3
phenyl	3-fluoro	3

and pharmaceutically acceptable salts thereof.

23. A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

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24. A method for preparing a pharmaceutical composition comprising mixing a compound of claim 1 and a pharmaceutically acceptable carrier.
- 5 25. A method for treating a disorder modulated by the  $\delta$ -opioid receptor in a subject in need thereof comprising administering to the subject a therapeutically effective amount of a compound of claim 1.
- 10 26. The method of claim 25 wherein the therapeutically effective amount of the compound of claim 1 is from about 0.001 mg/day to about 12,000 mg/day.
27. The method of claim 25 wherein the disorder is pain modulated by a therapeutically effective amount of a compound of claim 1.
- 15 28. The method of claim 25 wherein the disorder is selected from the group consisting of immune disorders, inflammation, neurological conditions, psychiatric conditions, drug abuse, alcohol abuse, gastritis, diarrhea, cardiovascular disorders and respiratory disorders modulated by a therapeutically effective amount of a compound of claim 1.
- 20 29. The method of claim 25 further comprising administering to the subject a therapeutically effective amount of a pharmaceutical composition of claim 23.
- 25 30. The method of claim 25 wherein the therapeutically effective amount of the pharmaceutical composition of claim 23 is from about 0.001 mg/day to about 12,000 mg/day.

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